

ABSTRACT

The invention relates to a method for operating an internal combustion engine of a watercraft, in particular on inland waters, in which

- in an electrolysis unit (11) for the production of hydrogen, water is split into hydrogen and oxygen,
- a carbon dioxide sorption unit (12) extracts carbon dioxide from the ambient air,
- the hydrogen and the carbon dioxide are fed to a methanol synthesis unit (34) for the production of methanol, and are synthesised therein to methanol,
- a photovoltaic unit (24) absorbs solar energy and converts it into electrical energy, wherein

the electrolysis unit (11), the carbon dioxide sorption unit (12) and the methanol synthesis unit (34) are powered by the electrical energy generated in the photovoltaic unit (24), wherein the methanol produced is transported by means of a distributor system to at least one tank of the watercraft, and is fed from the tank as required to the internal combustion engine, and therein is combusted to generate mechanical energy.

(Fig. 1)